

A Bimonthly
Bulletin on
Epidemiology
& Public Health
Practice in
Washington State

State Develops Stage 1 Smallpox Vaccination Plan as Part of National Emergency Preparedness Efforts

To help prepare our state for a potential attack with the smallpox virus, the Department of Health (DOH), local public health agencies, and hospitals have developed a Stage 1 vaccination plan. It is a component of the National Smallpox Vaccination Program announced by President Bush on December 13, 2002, as part of national emergency preparedness efforts. Under the plan, the federal Department of Health and Human Services and the Centers for Disease Control and Prevention (CDC) have asked state and local public health agencies to form Smallpox Response Teams comprised of health care, public health, and other critical staff.

State Priorities

Our priority in Washington State is to safely and cautiously vaccinate public health and health care workers identified in the Stage 1 plan to ensure we maintain a balance between preparedness and safety. Vaccinating in advance those people who need to be prepared will strengthen the ability of our public health and health care systems to respond quickly to protect the public in time of emergency. It will allow key personnel to perform their critical functions immediately and safely if a smallpox case is identified. The plan calls for vaccination of about 7,000 people in Washington. This total includes about 5,900 hospital staff members who would be part of smallpox health care teams, and about 1,100 public health workers organized into public health smallpox response teams.

Participation on smallpox response teams is voluntary. All volunteers will be: (1) screened to eliminate those most susceptible to vaccination side effects, (2) given information that will allow them to make an informed decision about volunteering for vaccination, and (3) monitored for adverse reactions and to ensure the vaccination is successful.

Although no information suggests an imminent threat of a smallpox attack, this plan for Stage 1 vaccination is a prudent step in our emergency preparedness efforts. The Stage 1 vaccination plan supplements our state's broader emergency response plan. It provides additional detail about how we will vaccinate key personnel who can respond to a possible smallpox attack.

The Stage 1 plan does not call for vaccination of the general public because the vaccine contains live vaccinia virus and can cause rare but serious side effects to a

Continued page 4

New System for Reporting of Hospital Discharge Data Will Save Time and Money

A new Internet-based system for processing hospital inpatient discharge data will reduce reporting costs for hospitals and program operating costs for the state. The good news cost savings in times of economic belt tightening is not the only benefit. The new system also will improve the quality and timeliness of data collection and reporting.

In May the Department of Health (DOH) will replace the Comprehensive Hospital Abstract Reporting System (CHARS) with a secure, Internet-based application. Secure Web technology will provide a place to get CHARS data online while protecting confidential information by limiting access and encrypting data. CHARS processes more

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Spotlight on Rare Infections

Fungus- and Tick-borne Diseases Can Be Severe

Coccidioidomycosis

Although public health disease reporting generally addresses common diseases, less common conditions also generate concern. One is coccidioidomycosis, a mycotic disease caused by *Coccidioides immitis*, a fungus found in soil in semiarid areas. Disease results from inhalation of fungus spores after disturbance of contaminated soil by human activities or natural disasters such as dust storms and earthquakes. Inhalation of a single spore can cause infection.

In Washington coccidioidomycosis is reportable as a Rare Disease of Public Health Significance. Most infected residents will have a history of travel to areas of known high incidence. In the United States such endemic areas include California, Arizona, New Mexico, Texas, and Utah. Many semi-arid areas of Central and South America also are endemic regions.

Coccidioidomycosis is asymptomatic in 60% of cases. The spectrum of disease includes a self-limiting influenza-like respiratory illness with fever, cough, headaches, rash, and body aches. Some patients fail to recover and develop a more severe progressive chronic pulmonary disease. Extrapulmonary or disseminated illness can affect the meninges, soft tissues, joints, and bone. Immunocompromised patients and the elderly have higher rates of severe disease; mortality is high in HIV-infected persons with diffuse lung disease. However, the infection can affect people of all ages.

Those at highest risk work in areas with endemic disease in occupations or settings exposing them to dust, such as construction, agricultural, and archeological sites. Travelers to these areas, particularly if projects, can be at risk.

Diagnosis requires identification of the fungus through microscopic examination of tissues or excretions. Complement fixation tests can detect antibody, but serial tests may be needed to confirm infection.

Certain animals also are susceptible to

working on construction or archeological

Certain animals also are susceptible to coccidioidomycosis. Twelve confirmed veterinary cases have been documented in Washington over the past six years. Three animals (two dogs and one horse) did not have travel histories to known endemic areas. These cases have raised the question whether some arid soil areas of Washington could be harboring the fungus.

Babesiosis

Another uncommon condition of public health concern in Washington is babesiosis, infection of the red blood cells with a protozoan parasite in the genus *Babesia*. Transmission typically occurs by ticks, with reservoirs such as rodents or cattle. Several pathogenic species include *B. divergens*, which occurs in Europe, and *B. microti*, the most frequent infection in the eastern and midwestern United States.

A new species, WA1, was identified in 1991 in a single case from Washington State. Two additional WA1 cases were documented in 1994, one a blood recipient and the other an asymptomatic donor. A second new species may have been identified in Washington during 2002. The specific reservoirs and tick vectors for Washington *Babesia* species are not known. Other *Babesia* species causing illness in humans have been identified in Missouri and Mexico. Additional species may affect animals.

Most babesiosis infections are asymptomatic, but the disease can be severe, particularly in persons who have no functioning spleen or who are immunocompromised. Symptoms include fever, chills, fatigue, hemolytic anemia resulting in jaundice, which may persist up to several months, and renal failure. Infection without symptoms can last for years.

Babesiosis is diagnosed by detecting parasites inside red blood cells. The organ-Continued page 4

For More Information

For a map of Washington's local public health jurisdictions and contact information, visit the DOH web site at http://www.doh.wa.gov/ LHJMap/LHJMap.htm

Information about tick-borne diseases is available at: http://www.doh.wa.gov/ehp/ts/Zoo/WATickDiseases.htm

Reporting Suspected or Confirmed Disease Cases

Clinicians handling suspected or confirmed cases of coccidioidomycosis or babesiosis should obtain a detailed exposure history and report cases to the local health jurisdiction. The Washington State Department of Health also is interested in information about possible human or animal cases. For consultation, contact Dr. Mira Leslie, DOH Office of Epidemiology at 206-361-2914.

Monthly Surveillance Data by County

December 2002* – Washington State Department of Health

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Adams	0	0	0	0	0	0	0	0	0	1	0	0	0	1/28
Asotin	0	0	0	0	0	0	0	0	0	5	0	0	0	0/0
Benton	1	0	2	0	0	0	0	0	1	20	0	0	0	0/12
Chelan	0	1	0	0	0	0	0	1	0	22	0	0	0	0/22
Clallam	0	1	0	0	0	0	0	1	0	11	0	0	0	0/#
Clark	0	2	0	1	0	0	1	2	4	89	13	0	0	0/16
Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Cowlitz	0	0	0	0	2	0	0	1	0	3	1	0	0	2/45
Douglas	0	0	0	0	0	0	0	1	0	7	1	0	0	0/0
Ferry	0	0	0	0	0	0	0	0	0	2	0	0	0	0/0
Franklin	2	2	1	1	0	0	0	1	0	12	0	1	1	0/19
Garfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Grant	0	1	0	0	0	0	0	0	0	14	0	0	0	0/128
Grays Harbor	0	0	0	0	0	0	0	3	0	11	3	0	0	0/#
Island	0	0	0	0	0	0	0	0	0	19	1	0	0	0/#
Jefferson	0	1	0	0	0	0	0	0	0	1	0	0	0	1/5
King	8	20	7	2	2	0	2	28	17	429	127	23	3	1/35
Kitsap	0	1	0	0	0	0	0	0	1	55	5	0	1	0/#
Kittitas	0	0	0	0	0	0	0	0	0	5	0	0	0	0/0
Klickitat	0	0	0	0	0	0	0	0	0	4	0	0	0	0/#
Lewis	0	1	0	0	0	0	0	0	0	10	3	0	0	0/0
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Mason	0	0	0	0	0	0	0	0	0	12	0	0	0	0/#
Okanogan	0	0	0	0	0	0	0	1	0	8	0	0	1	0/26
Pacific	0	0	0	0	0	0	0	1	0	2	0	0	0	0/0
Pend Oreille	0	0	0	0	0	0	0	0	0	2	0	0	0	0/0
Pierce	0	0	4	0	2	1	0	12	0	182	37	0	0	0/26
San Juan	0	0	0	0	0	0	0	0	0	1	0	0	0	0/0
Skagit	0	1	0	0	0	0	0	0	0	21	0	0	0	0/#
Skamania	0	0	0	0	0	0	0	0	0	2	0	0	0	0/0
Snohomish	0	1	0	0	1	0	0	2	3	88	15	1	0	0/9
Spokane	0	1	1	1	1	0	0	0	0	89	16	1	0	0/17
Stevens	0	0	0	0	0	0	0	0	0	2	0	1	0	0/0
Thurston	0	1	1	0	0	0	0	3	1	41	5	0	0	0/#
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0/#
Walla Walla	0	1	0	0	0	0	0	0	0	8	0	0	0	3/40
Whatcom	4	3	1	0	0	0	0	0	1	21	6	0	0	1/14
Whitman	0	0	0	0	0	0	0	1	0	2	0	0	0	0/#
Yakima	6	18	9	1	1	0	3	40	0	81	6	0	0	3/160
Unknown														0/0
Current Month	21	56	26	6	9	1	6	98	28	1280	239	27	6	12/619
December 2001	28	177	34	44	36	8	12	25	38	1161	230	53	4	10/356
2002 to date	160	539	193	151	76	25	67	519	252	14937	2925	447	277	189/7751
2001 to date	150	681	236	184	170	31	71	184	224	13631	2991	524	212	124/4360

^{*} Data are provisional based on reports received as of December 31, unless otherwise noted.

† Unconfirmed reports of illness associated with pesticide exposure.

§# Number of elevated tests (data include unconfirmed reports) / total tests performed (not number of children tested); number of tests per county indicates county of health care provider, not county of residence for children tested; # means fewer than 5 tests performed, number omitted for confidentiality reasons.



WWW Access Tips

For more information about smallpox, visit the DOH web site at http://www.doh.wa.gov/BioTerr/ and the CDC web site at www.cdc.gov/smallpox

epiTRENDS online

http://www.doh.wa.gov/ Publicat/EpiTrends/03_ EpiTrends/2003_trend.htm

Hospital Data (from page 1)

than 500,000 inpatient reports each year from 95 acute care facilities in Washington.

State law requires hospitals to report to the DOH certain information about patient stays in their facilities. The Center for Health Statistics collects the information in CHARS and uses this information to support a variety of vital public health functions including evaluating the cost, quality, and access to health care.

DOH contracts with a vendor to process, compile, edit, and release data, and to produce reports. Hospitals have been correcting data errors through a paper process requiring mailing or faxing of error reports and corrections among DOH, hospitals, and the vendor. This labor-intensive process is largely unchanged since the 1980s.

The new improved CHARS will allow hospitals to submit data easily and securely over the Internet. Data will be evaluated and errors promptly reported back to the hospitals online so corrections can be made. Time required for data processing and reporting will decline dramatically, to hours instead of weeks. The expected benefits include reduced workload and related costs at the hospitals and improved quality of CHARS information. DOH anticipates that the planned efficiencies will reduce net operating costs to the state by about \$840,000 over 10 years.

For More Information: Contact Bill Mackey, CHARS Project Director, at 360-236-4222, or bill.mackey@doh.wa.gov

Smallpox Plan (from page 1)

vaccinated person and possibly to those who live with someone who has been recently vaccinated. Additionally, for the general public, the risks of serious side effects of vaccination outweigh the risk of smallpox in the absence of a smallpox case.

For More Information: Please visit the DOH and CDC smallpox web sites listed under WWW Access Tips or call the CDC Public Response Hotline at 1-888-246-2675.

Babesiosis (from page 2)

isms resemble and may be mistaken for the *Plasmodium* parasites causing malaria. Differentiating the diagnosis may be particularly complicated for a case with potential exposure through travel or transfusion, risk factors for both malaria and babesiosis. Diagnostic assistance and serologic tests are available through the Department of Health Public Health Laboratories. The public health investigation includes determining whether the case patient donated or received blood.

Babesiosis may be acquired during travel to other regions or countries, particularly during summer when ticks are active. Outdoor occupations or activities may increase the risk of exposure to ticks, which can carry other infections such as Lyme disease. Although all tick-borne conditions are rare in Washington, precautions should be taken to reduce exposure to ticks in areas with shrubby or high grassy vegetation.

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